Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Section 68.4 of the Commission's Rules	)	WT Docket No. 01-309
Governing Hearing Aid Compatible Telephones	)	
	)	
Cingular Wireless LLC Petition for Waiver of	)	
Section 20.19(c)(3)(i) of the Commission's Rules	)	

CINGULAR WIRELESS ACCEPTANCE OF WAIVER CONDITIONS
and
HEARING AID COMPATIBILITY SEMI-ANNUAL STATUS REPORT

Cingular Wireless LLC (Cingular), through undersigned counsel, hereby accepts the waiver conditions imposed in the September 8, 2005 *Waiver Order* in this proceeding.[1] This document also contains Cingular's semi-annual status report on its progress in complying with the rules of the Federal Communications Commission (FCC or Commission) governing hearing aid compatible handsets. This report supplements the Hearing Aid Compatibility Status Report #4 submitted to the Commission this date by the Alliance for Telecommunications Industry Solutions (ATIS) on behalf of the ATIS Incubator Solutions Program #4 – Hearing Aid Compatibility.

I. Background.

The Hearing Aid Compatibility Act of 1988 (HAC Act) required manufacturers of telephones to be used in the United States to "provide internal means for effective use with hearing aids that are designed to be compatible with telephones which meet

[1] *In the Matter of Section 68.4(a) of the Commission's Rules Governing Hearing Aid-Compatible Telephones; Cingular Wireless LLC Petition for Waiver of Section 20.19(c)(3)(i)(A) of the Commission's Rules*, WT Docket No. 01-309, Memorandum Opinion and Order, FCC 05-166), rel. Sept. 8, 2005 (*Waiver Order*).

established technical standards for hearing aid compatibility."[2] The HAC Act exempted telephones used with public mobile services in part because Congress recognized that ambient noise and background fields made inductive coupling difficult.[3] It authorized the Commission to revoke or limit the exemption provided, among other things, "compliance with the requirements … is technologically feasible for the telephones to which the exemption applies."[4]

In 2003, the Commission lifted the exemption for wireless handsets and adopted Section 20.19 of the rules.[5] This rule imposed specific benchmarks for both handset manufacturers and wireless service providers. It defines a wireless phone as hearing aid-compatible if it rates as U3 for radio frequency interference and U3T for inductive coupling under American National Standards Institute (ANSI) standard ANSI C63.19-2001. 47 C.F.R. § 20.19(c)(1) requires that manufacturers offer to service providers at least two radio frequency HAC compliant handset models per air interface by September 16, 2005, and ensure that at least 50 percent of their handset models per air interface are HAC compliant by February 18, 2008. Manufacturers must offer to service providers at least two handsets that meet the HAC U3T requirement for inductive coupling by September 18, 2006.

47 C.F.R. § 20.19(c)(3) requires Tier 1 wireless service providers to offer at least four radio frequency HAC compliant handsets per air interface by September 16, 2005, and ensure that at least 50 percent of their handset models are radio frequency HAC

[2] Hearing Aid Compatibility Act of 1988, 47 U.S.C. § 610(b)(1)(B).
[3] 47 U.S.C. § 610(b)(2)(A)(ii); H.R. Rep. No. 100-674, at 9 ((1988).
[4] 47 U.S.C. § 601(b)(2)(C)(iii).
[5] *See Section 68.4(a) of the Commission's Rules Governing Hearing Aid Compatible Telephones,* Report and Order, WT Docket No. 01-309, 18 FCC Rcd 16753, *Erratum*, 18 FCC Rcd 18047 (2003((*HAC Order).*

compliant by February 18, 2008. They must offer at least two handsets per air interface that are HAC U3T compliant for inductive coupling by September 18, 2006.

At the time the C63.19 standard was being developed the only GSM handsets in the United States operated at 1900 MHz with 1 watt power, and the Commission in adopting the *HAC Order* concluded that it was technically feasible to achieve a U3 rating for GSM phones based on that frequency band. When testing protocols for applying the C63.19 standard to GSM phones were finalized for dual band GSM handsets operating at 1900 MHz (1 watt power) and 850 MHz (2 watt power), it became apparent that handsets using existing designs could not achieve a U3 rating at 850 MHz. This proved true across designs and across manufacturers. The ANSI C63.19 standard provides that the rating of a handset for labeling purposes is the *lower* of any rating the handset receives in any frequency band. Thus, a dual frequency handset that achieves a U3 rating at 1900 MHz and a U1 rating at 850 MHz would be rated U1for labeling and compliance purposes, and therefore would not be HAC compliant.

Manufacturers of modern, digital hearing aids have achieved impressive immunity from radio frequency interference. Digital hearing aids, many of which are built to European requirements, are far less susceptible to interference than the Commission assumed when it adopted the U3 requirement.[6] Based on evidence of usability, Cingular conducted or participated in a series of tests that demonstrated that hearing aids exhibit 10 dB or greater immunity to GSM 850 wireless devices than to GSM 1900 wireless devices.

[6] The Hearing Industries Association noted that hearing aid immunity to radio frequency interference has improved by 40 dB in recent years. *See* Hearing Industries Association, *ex parte* presentation in WT Docket No. 01-390 at 2, filed May 31, 2005.

On August 5, 2005, Cingular filed a Petition for Waiver of Section 20.19(C)(3)(i)(A) of the Commission's Rules. In its petition, Cingular laid out the evidence for a frequency band differential in the C63.19 standard for GSM handsets. Citing user experience, its own testing and testing conducted by others, and the inclusion of a band differential in the European and Australian standards, Cingular sought a waiver of the U3 requirement until the C63.19 standard could be corrected to include a band differential. In commenting on Cingular's waiver request ATIS Working Group 9 suggested an alternative approach. ATIS recommended that the U rating achieved at 1900 MHz be treated as the U rating for dual band phones.

On September 8, 2005 the Commission accepted Working Group 9's recommendation and granted a waiver until August 1, 2006. Under the waiver, the Commission will accept the hearing aid compatibility compliance rating for 1900 MHz operation as the overall compliance rating for dual-band GSM digital wireless handsets that operate in both the 850 MHz and 1900 MHz bands. The waiver applies to all handset manufacturers, carriers and service providers. The *Waiver Order* states: "We expect wireless carriers, service providers and handset manufacturers to make available dual-band GSM digital wireless handsets with a U3 or higher rating in both the 850 MHz and 1900 MHz bands no later than August 1, 2006."[7]

The *Waiver Order* denied Cingular's request to tie the waiver relief to a revision of the C63.19 standard.[8] It granted instead the ATIS request to allow the phone's rating at

[7] *Waiver Order*, ¶ 17.
[8] *Id.*

1900 MHz to serve as the rating for the phone as a whole until August 1, 2006.[9] The Commission imposed the following conditions on Cingular and any other entity that avails itself of the relief afforded by the waiver order: (1) notify the Commission in its November 17, 2005 compliance report that it accepts the waiver conditions, and "include detailed information…that describes and discusses with specificity the status of its efforts to offer dual-band GSM handsets that achieve a U3 or higher rating in the 850 MHz band in addition to the 1900 MHz band; (2) include in its May 17, 2006 compliance report a detailed and specific status report on its efforts to offer dual-band handsets that achieve a U3 or higher rating in both bands; (3) ensure a 30 day trial period or otherwise adopt an acceptable, flexible return policy for customers seeking a HAC handset; (4) make available current technical and anecdotal information regarding the hearing aid compatibility of specific GSM handsets, and include a description of these in its compliance report.[10]

II. Cingular Accepts the Waiver Conditions.

Cingular was unable to comply with the requirement of Section 20.19 of the Commission's rules that it offer at least 4 dual band handsets that achieve a U3 rating under the current ANSI C63.19 standard. Cingular therefore accepts the conditions of the *Waiver Order*. In this filing and in Cingular's contribution to the ATIS filing, Cingular sets forth the status of its efforts to offer dual-band GSM handsets that achieve a rating of U3 or higher in the 850 MHz band in addition to the 1900 MHz band. With regard to the customer outreach conditions of the *Waiver Order*, Cingular offers a thirty-day return

[9] *Waiver Order*, ¶ 8.
[10] *See Waiver Order*, ¶ 23.

policy. Cingular makes available to the public current technical and anecdotal information regarding the hearing aid compatibility of specific GSM digital wireless handsets.

A. Cingular's Efforts with the HAC Incubator and Standards Bodies.

Cingular was an invited voting participant member company of ANSI ASC C63 (American National Standards Institute Accredited Standards Committee on Electromagnetic Compatibility C63) and has been involved in the development of the latest version of the C63.19 – 2005 standard. Cingular has voted on all revisions to the C63.19 standard that ANSI ASC C63 has released within the last two years and is a participating member of C63 SC8 (Subcommittee 8 – Medical Devices and EMC). Cingular is also a member of AISP.4-HAC (Alliance for Telecommunications Industry Solutions [ATIS] Incubator Solutions Program 4 Hearing Aid Compatibility) and participates in all of the active working groups. Cingular has also contributed to the AISP.4-HAC Working Group 4 Test Plan: Hearing Aid Compatibility Technical Specification (HACTS). Cingular has a leadership position in AISP.4-HAC Working Group 6. This group is responsible for Labeling and Outreach programs. Cingular has taken a key leadership role in the latest working group 9: 850 MHz and Higher Power Technology Challenges. WG-9 was commissioned by the AISP.4-HAC Incubator to examine issues surrounding wireless devices operating at the 850 MHz band with up to 2 watts of power.

B. Cingular's Outreach Efforts.

Cingular chaired ATIS' WG-6 (Outreach and Labeling) and facilitated efforts to develop three brochures targeting industry, audiologists and other hearing health professionals, and consumers who use hearing aids. Cingular contributed to the list of over 50 hearing loss related organizations for a targeted outreach to their constituents. Cingular also provided background information to the American Academy of Audiology and American Speech-Language-Hearing Association to help audiologists better understand hearing aid compatibility and, in turn, to help hearing aid users interested in becoming digital wireless consumers. As part of a concerted outreach effort, Cingular representatives participated in presentations to Self Help for Hard of Hearing People's (SHHH) national convention as well as the biennial conference of Telecommunications for the Deaf, Inc. Cingular's Internet site includes background information on hearing aid compatibility as well as other options for individuals who are deaf or have a hearing loss and useful links to disability related organizations including SHHH, the Telecommunications Rehabilitation Engineering Research Center at Gallaudet, and Telecommunications for the Deaf, Inc. ATIS WG-6 collaborated on "Get the Buzz Out" brochures and these were made available at Cingular owned and operated stores.

Due to the timing of the *Waiver Order*, which was released one week prior to the September 16, 2005 effective date of the mandate, there were many phones that became compliant pursuant to the waiver that were already packaged, shipped or ready to be shipped. Device manufacturers either placed a sticker on the phone box on initial shipments and then instituted a rolling change to the box text to reflect the rating or just instituted a rolling change to the box to reflect the rating. The wording on the box was

"Rated for Hearing Aids: M3" or "Rated for Hearing Aids: M4" depending on the rating. Call out cards next to HAC certified handsets in Cingular owned and operated stores included HAC ratings as well as information about other handset features. In addition, single page explanations of HAC, developed in conjunction with consumer organizations, were provided to customers who purchased HAC compliant handsets.

C. Cingular's Efforts with Vendors.

Cingular is working closely with its vendors to produce handsets that comply with the C63.19 standard. While it may be theoretically possible to produce handsets that meet the existing standard for GSM 850 MHz, Cingular's vendors report that substantial design changes would be necessary, and the resulting handsets would be bulkier, few in number and more expensive than handsets offered by carriers using other air interfaces. Cingular's vendors question whether such handsets would achieve market acceptance. Based on vendor reports, the ability of Cingular to have four HAC compliant handsets by August 1, 2006 or five by September 16, 2006 is dependent on adoption of the 3.10 version of ANSI C63.19 that is currently being balloted and that contains a 10 dB band differential between the 850 MHz and 1900 MHz bands. Cingular's vendors are actively involved in the standards setting process and in the HAC Incubator working groups.

Cingular initiated in the spring of 2005, and continues to conduct, regular weekly or bi-weekly technical calls with its major handset suppliers to monitor progress of incorporating and testing hearing aid compatibility in new models.

In August 2005, Cingular's Chief Technical Officer forwarded a letter to each of Cingular's major handset suppliers reminding them of Cingular's September 2006 requirements for HAC compliant handsets. This communication stressed that handsets

must meet the HAC requirements at both 850 MHz and 1900 MHz for GSM and GSM/UMTS as appropriate. Each supplier was required to acknowledge Cingular's September 2006 requirements and indicate their commitment to helping Cingular meet its HAC obligations.

D. Cingular HAC Compliant Handsets.

As of November 1, 2005, a minimum of four (4) HAC certified handsets are offered at each company owned and operated location, and at Cingular on-line (www.cingular.com). Some locations may also have available additional HAC certified handsets (via the *Waiver Order*) that are at end of product life and no longer in production. As new products are introduced, some may be HAC certified and could be offered at a limited number of locations or nationwide. The chart below lists the HAC compliant handsets offered by Cingular. In each case, the handset became compliant due to the waiver.

Model	Band(s)	Air Interface(s)	ANSI C63.19 Rating	FCC ID	Grant Type
Nokia 6102h	800,1900	GSM	M3	PPIRM-77XH	Class 2 w/waiver
Samsung P207	800,1900	GSM	M3	A3LSGHP207	Class 2 w/waiver
LG C2000	800,1900	GSM	M3	BEJC2000	Class 2 w/waiver
Samsung D307	800,1900	GSM	M4	A3LSGHD307	Class 2 w/waiver
Motorola V3	800,1900	GSM	M3	IHDT56EU1	Class 2 w/waiver

III. Conclusion.

Cingular appreciates the Commission's prompt action on its waiver request and accepts the conditions laid out in the *Waiver Order*. Cingular will report to the Commission on progress in meeting the requirements of the Commission's rules governing HAC compliance. Cingular will continue its outreach efforts to hearing impaired consumers. Based on information supplied by its handset vendors, Cingular's ability to achieve HAC compliance by August 1, 2006 is dependent upon timely adoption of the 3.10 version of the C63.19 standard currently being balloted.

Respectfully submitted,

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